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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**



Declaration  
Submitted  
With Initial  
Filing

OR



Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

A03092US (15630.141)

First Named Inventor

Bhabendra Pradhan

**COMPLETE IF KNOWN**

Application Number

Filing Date

Art Unit

Examiner Name

**I hereby declare that:**

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**"Improved Catalyst and Process to Produce Nanocarbon Materials in High Yield and at High Selectivity at Reduced Reaction Temperatures"**

*(Title of the Invention)*

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application<br>Number(s) | Country | Foreign Filing Date<br>(MM/DD/YYYY) | Priority<br>Not Claimed  | Certified Copy Attached? |                          |
|--|---------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|  |         |                                     |                          | Yes                      | No                       |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 37 CFR 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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**DECLARATION — Utility or Design Patent Application**

|   |  |             |                             |   |                                      |  |  |
|---|--|-------------|-----------------------------|---|--------------------------------------|--|--|
| Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number or Bar Code Label   |  |             |                             | 22920   |                                      | OR <input type="checkbox"/> Correspondence address below |  |
| Name<br>Gregory C. Smith, Garvey, Smith, Nehrbass & Doody, L.L.C.   |  |             |                             |   |                                      |  |  |
| Address<br>3838 N. Causeway Blvd., Suite 3290   |  |             |                             |   |                                      |  |  |
| City<br>Metairie  |  |             |                             | State<br>LA   |                                      | ZIP<br>70002   |  |
| Country<br>US   |  |             | Telephone<br>(504) 835-2000 |   | Fax<br>(504) 835-2070                |  |  |
| I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. |  |             |                             |   |                                      |  |  |
| NAME OF SOLE OR FIRST INVENTOR:   |  |             |                             | <input type="checkbox"/> A petition has been filed for this unsigned inventor |                                      |  |  |
| Given Name<br>(first and middle [if any])<br>Bhabendra  |  |             |                             |   | Family Name<br>or Surname<br>Pradhan |  |  |
| Inventor's Signature<br><i>Bhabendra K. Pradhan</i>   |  |             |                             |   |                                      | Date<br>07/23/03   |  |
| Residence: City<br>Marietta   |  | State<br>GA |                             | Country<br>US   |                                      | Citizenship<br>Indian                                    |  |
| Mailing Address<br>360 Bloombridge Way N.W.   |  |             |                             |   |                                      |  |  |
| City<br>Marietta  |  | State<br>GA |                             | ZIP<br>30066  |                                      | Country<br>US  |  |
| NAME OF SECOND INVENTOR:  |  |             |                             | <input type="checkbox"/> A petition has been filed for this unsigned inventor |                                      |  |  |
| Given Name<br>(first and middle [if any])   |  |             |                             |   | Family Name<br>or Surname            |  |  |
| Inventor's Signature  |  |             |                             |   |                                      | Date   |  |
| Residence: City   |  | State       |                             | Country   |                                      | Citizenship  |  |
| Mailing Address   |  |             |                             |   |                                      |  |  |
| City  |  | State       |                             | ZIP   |                                      | Country  |  |
| <input type="checkbox"/> Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.  |  |             |                             |   |                                      |  |  |

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**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

|                        |                                   |
|------------------------|-----------------------------------|
| Application Number     |                                   |
| Filing Date            |                                   |
| First Named Inventor   | Bhabendra Pradhan                 |
| Title                  | "Improved Catalyst and Process to |
| Art Unit               |                                   |
| Examiner Name          |                                   |
| Attorney Docket Number | A03092US (15630.141)              |

I hereby appoint:

☒ Practitioners at Customer Number

22920

Place Customer  
Number Bar Code  
Label here

OR

☐ Practitioner(s) named below:

| Name             | Registration Number |
|------------------|---------------------|
| Gregory C. Smith | 29,441              |
|                  |                     |
|                  |                     |
|                  |                     |

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

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OR

|  |   |       |                |     |       |
|--|---|-------|----------------|-----|-------|
| <input type="checkbox"/> Firm or Individual Name | Gregory C. Smith                        |       |                |     |       |
| Address  | Garvey, Smith, Nehrbass & Doody, L.L.C. |       |                |     |       |
| Address  | 3838 N. Causeway Blvd., Suite 3290      |       |                |     |       |
| City   | Metairie                                | State | LA             | Zip | 70002 |
| Country  | USA                                     |       |                |     |       |
| Telephone  | (504) 835-2000                          | Fax   | (504) 835-2070 |     |       |

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).**SIGNATURE of Applicant or Assignee of Record**

|           |                      |           |              |
|-----------|----------------------|-----------|--------------|
| Name      | BHABENDRA K. PRADHAN |           |              |
| Signature | Bhabendra K. Pradhan |           |              |
| Date      | 07/23/03             | Telephone | 770 792 9460 |

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Columbian Chemicals Co.

Application No./Patent No.: \_\_\_\_\_ Filed/Issue Date: \_\_\_\_\_

Entitled: "Improved Catalyst and Process to Produce Nanocarbon Materials in High Yield and at High Selectivity atColumbian Chemical Co., a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.  
[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

07/23/03

Date

RHABENDRA K. PRADHAN

Typed or printed name

Rhabendra K. Pradhan

Signature

Materials Scientist

Title

## ASSIGNMENT

WHEREAS, I, Bhabendra Pradhan, am the sole inventor of a ""Improved Catalyst and Process to Produce Nanocarbon Materials in High Yield and at High Selectivity at Reduced Reaction Temperatures", an application for United States Letters Patent for which is being filed herewith; and

WHEREAS, Columbian Chemicals Company (hereinafter "ASSIGNEE"), a corporation created and existing under and by virtue of the laws of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by ASSIGNEE and for other good and valuable considerations, the receipt of which is hereby acknowledged, I hereby sell, assign, transfer and set over to ASSIGNEE all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, continuations-in-part, and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by ASSIGNEE for its own use and benefit, and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

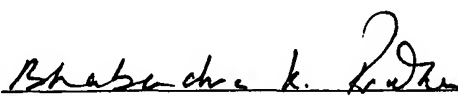
And I hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said

application and from any and all divisions, continuations, continuations-in-part, and reissues thereof, to ASSIGNEE as assignee of my entire interest, and hereby covenant that I have the full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith.

And I further hereby covenant and agree that I will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to ASSIGNEE, its successors, assigns, or other legal representatives and that if ASSIGNEE, its successors, assigns or other legal representatives shall desire to file any divisional or continuation applications or to secure a reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional, continuation, or continuation-in-part application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And I do further covenant and agree that I will, at any time upon request, communicate to ASSIGNEE, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof as may be known to me, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

EXECUTED THIS 23 day of July, 2003.

  
Bhabendra Pradhan